

Illinois Higher Education Center for Alcohol, Other Drug and Violence Prevention (IHEC)

Report On

Alcohol and Other Drug Use Among College Students in Illinois

Analysis of the 2014 Illinois CORE Survey



Eastern Illinois University

With funding from the
Illinois Department of Human Services
Bureau of Positive Youth Development



An Illinois Higher Education Center Working Paper On

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For Illinois Higher Education Center for Alcohol, Other Drug and Violence Prevention

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Funded by the

Illinois Department of Human Services, Bureau of Positive Youth Development

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Executive Summary

In spring 2014, the Illinois Higher Education Center for Alcohol, Other Drug, and Violence Prevention, with funding from the Illinois Department of Human Services, Bureau of Positive Youth Development, provided Illinois institutions of higher education the opportunity to participate in the CORE Alcohol and Drug survey. The CORE survey was developed in 1987 to measure college students' alcohol and drug usage, attitudes, and beliefs. All results are based on self-reported information from 16,566 students in 30 schools. The data provides key insight into the students' attitudes towards alcohol and drugs as well as their perceptions of alcohol and drug use in their campus environments.

The survey included two main types of questions. The first type related to students' actual usage and consequences of usage. The second type related to students' perceptions and attitudes about alcohol and drugs. There are also demographic questions to determine the students' background. For the 2014 administration of the CORE Survey, all institutions completed the Revised CORE Long Form 2. The CORE Alcohol and Drug Survey Long Form has been utilized extensively in the intervening years to assess college students' risk behaviors and was updated to capture contemporary issues in alcohol and other drug use in institutions of higher education.

Methodology

This report employs both qualitative and quantitative approaches in providing insight into alcohol and drug use in colleges in the state of Illinois. Graphs are extensively used to provide data visualization and, where necessary, appropriate statistical techniques are employed to test the strength of the claims suggested by the visualized data¹. Comparisons are mainly made between community colleges (*henceforth* two-year colleges) and four-year degree granting universities (*henceforth* four-year colleges), as well as gender and age groups. For the purpose of this report, *underage* students are defined as students who were below the state of Illinois' legal minimum drinking age of 21 at the time of the 2014 survey.

¹ All statistical techniques adopted in testing the validity of results are explained in the appendix attached to this report.

Key Findings

Alcohol Usage:

Alcohol use in colleges across the state remained high, with roughly eight out of every ten students reporting having taken alcohol in the past year. Of greater concern is underage drinking, with 12% of the entire sample being underage students who reported taking alcohol in the past year. This suggests an urgent need for increased awareness and policy action on underage drinking. On the sources of alcohol, many underage students (24%) obtained alcohol through adult friends, followed closely by alcohol taken from parents without their knowledge (14%) and from bars and restaurants that do not ask for ID cards (5%). Other major findings in this report include:

- 80% of all respondents reported consuming alcohol in the past 12 months
- 31% of the entire sample were underage students who reported drinking alcohol in the last year
- 72% of all underage respondents reported consuming alcohol in the last 12 months
- 39% of all underage male students reported binge drinking in the past 12 months
- 33% of all underage female students reported binge drinking in the past 12 months
- The average number of drinks taken by *drinkers* stood at 8.9 drinks² per week
- 91% of all respondents reported drinking to the point of intoxication before turning 21 years old

Other Drug Usage

The report finds drug use to be less rampant than alcohol use in Illinois colleges. Marijuana use stood at 17% among all respondents in the last month preceding the survey. In two-year colleges, marijuana use in the month preceding the survey stood at 20% as compared to approximately 16% in four-year colleges. The major sources of marijuana were acquaintances that supplied about 28% of all users with marijuana at least once. These sources were followed closely by friends at school (20%), drug dealers (19%) and friends at home (17%). Other findings include:

- Marijuana use declined from 27% in 2012 to roughly 17% in the last year
- Tobacco use, however, rose marginally from 22% in 2012 to about 24% in the last year

² For the purpose of this study, a drink is defined as: 5oz. wine, 10oz. wine cooler, 12oz. beer (10oz. microbrew, 8-9oz. Malt Liquor, Canadian Beer or Ice Beer) or 1.5oz. of 80 proof liquor (mixed drink or shot)

- 3% of all respondents reported using cocaine, at least once, in the previous year
- 0.4% of the entire sample reported using steroids, at least once, in the previous year
- 4% of all students reported using marijuana in on-campus residences— the single highest place where marijuana was consumed in 2014
- 22% of all male students reported using marijuana in the previous year
- 14% of all female students reported using marijuana in the previous year

Effects of Alcohol and Drug Use

In order to reduce the risk of drunkenness and its associated effects, many respondents reported taking protective measures either before, during, or after drinking, such as eating before drinking (76%), setting limits to how much they drink (62%), and avoiding drinking games (53%). However, the data suggests that these measures were, at least once, not effective in averting all the harmful effects of drinking. For example:

- 38% of *all drinkers* reported having experienced hangover, at least once after drinking
- 11% of *all drinkers* reported having missed class, at least once, as a result of drinking
- 8% of *all drinkers* reported performing poorly on a test as a result of drinking
- 5% of *all drinkers* reported having gone to class under the influence
- Approximately 5% and 4% of *all drinkers* reported having had unwanted and unprotected sex, respectively, as a result of drinking
- 6% of *all drinkers* reported having at least thought once that they might have a drinking problem
- Approximately 9% of *all drinkers* reported ever driving under the influence.

Perceptions Regarding Drug and Alcohol Use

Wide disparities were observed between perceived and actual alcohol and other drug use. These differences were statistically significant and reflect widespread misconceptions about the actual level of alcohol and drugs consumption in colleges. Again, even though 80% of all students agreed or strongly agreed that they were aware of their school's alcohol policies, a similar proportion (78%) agreed or strongly agreed that it was easy for underage students to get alcohol without getting caught. Other key findings include:

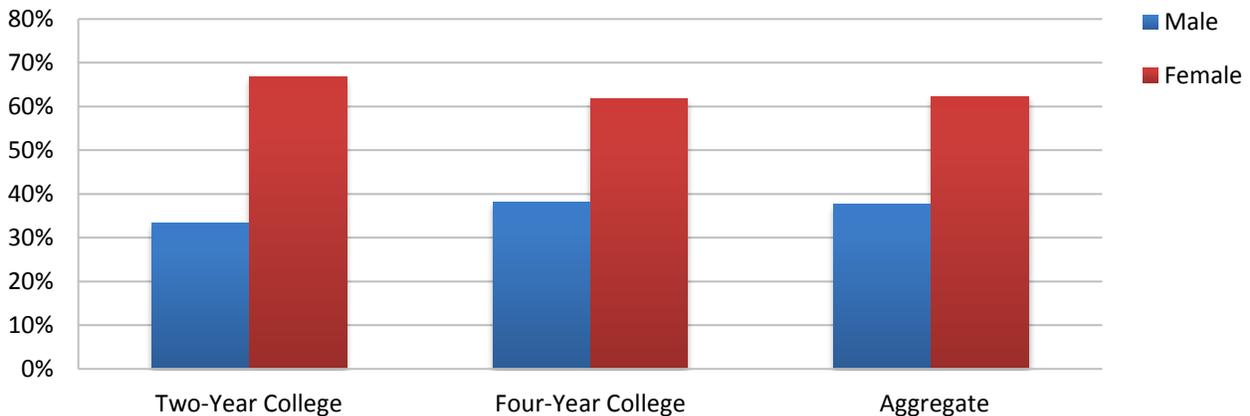
- 78% of all students agreed or strongly agreed that it is easy for underage students to get access to alcohol.
- 82% of underage students agreed or strongly agreed that alcohol was easily available to underage students on their campuses
- The perceived mean number of alcohol consumed by the average student on a typical occasion stood at 5.5 drinks while the actual average number of drinks stood at 2.5 drinks per student on a typical occasion
- While recreational marijuana use stood at 21% in the previous year, the perceived use of marijuana by the average student stood at 85%, reflecting a 64 percentage point gap

Similar disparities were observed in perceptions regarding the use of tobacco, cocaine, steroids inhalants and other drugs. With regards to lowering the minimum age for drinking, 54% who supported the idea were above 21 years old, while the remaining 46% were students below the age of 21.

Background of Survey Participants

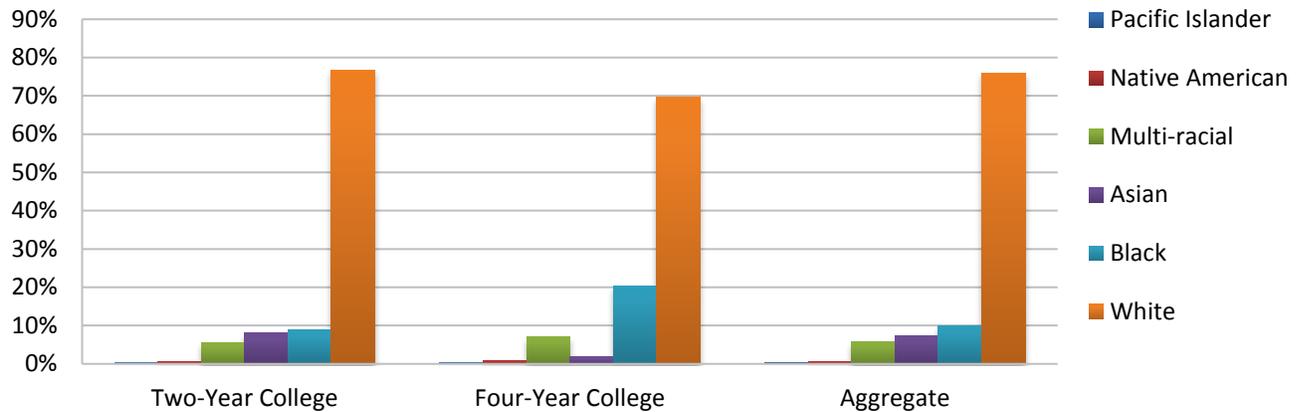
The 2014 CORE survey collected information on alcohol and drug use from a total of 16,566 respondents, representing a 32% increase from the 2012 number of respondents. Out of these, 1,766 responses representing 11% of the entire survey sample, was gathered from two-year colleges while 89% of the responses were collected from four-year colleges. 62% of the respondents were female and 38% were male. Generally, the gender distribution of two and four-year colleges were not significantly different from the 2012 state survey, which stood at 66% and 34% for females and males respectively.

Figure 1.1
Gender Distribution by Institution



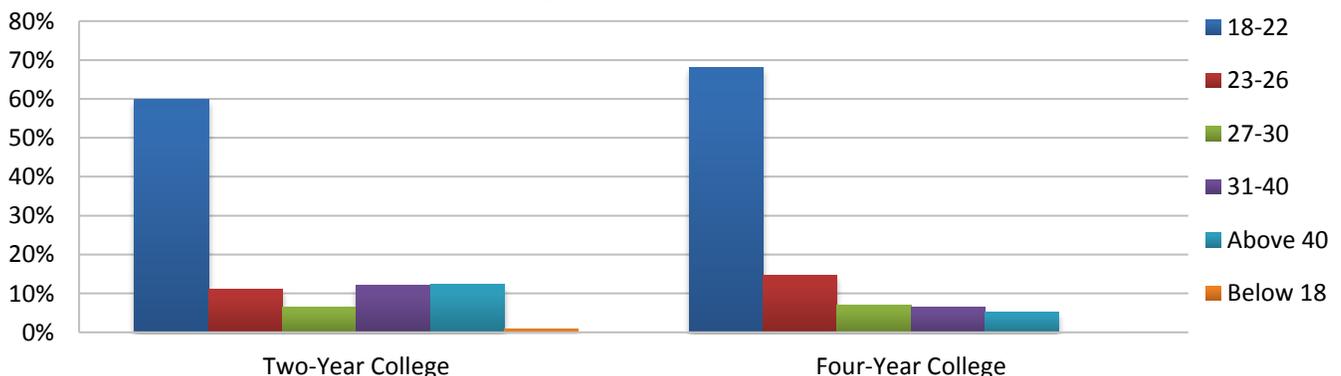
Male enrollment per the sample size stood at 38% at the four-year colleges and at 33% at the two-year colleges while female enrollment stood at 67% and at 62% at the two and four-year colleges respectively, as shown in Figure 1.1.

Figure 1.2
Ethnic Distribution by Institution Type



The respondents came from diverse cultural and ethnic backgrounds. Approximately 76% identified as White (Non-Hispanic), 10% as Black (African American), 8% as Asian, 0.6% as Native American, 0.3% as Pacific Islander and 6% as multi-racial. The distribution within four and two-year colleges generally reflected the state aggregate as shown in Figure 1.2. The mean age of respondents stood at 23.14 years. However, while students in four-year colleges averaged 22.8 years, the average age for two-year colleges stood at 25.3 years, slightly above the CORE average and also below the 2014 American Association of Community Colleges' mean age of 28; suggesting that two-year colleges in Illinois continue to provide access to education for many nontraditional students, such as adults who are working while enrolled (AACB, 2014). However, approximately 60% of the students from two-year

Figure 1.3
Age Distribution of Students



colleges were aged 18 to 22 while 68% of students in four-year colleges were between 18 and 22. Figure 1.3 gives a comparison of age distribution of students between the two and four-year colleges.

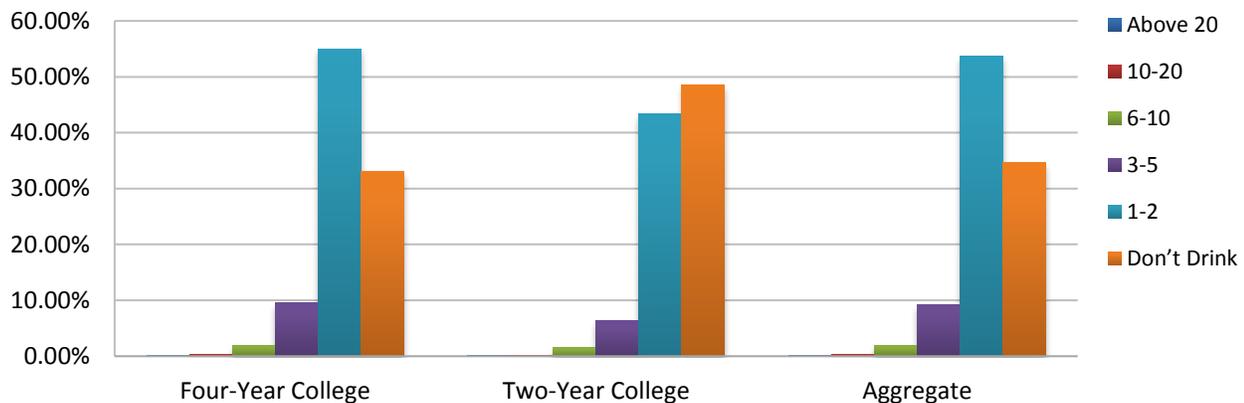
Alcohol Use in Illinois' Two and Four-Year Colleges

Alcohol consumption in the entire sample of 16,566 students stood at approximately 80%. Four-year college students who reported taking alcohol stood at 73% of the entire sample as compared to 7% of their two-year college counterparts. When categorized by age, underage drinkers constituted approximately 31% of the entire sample. The summary of these statistics are provided in Table 1.0 below.

Table 1.0 Alcohol Use by Institution Type			
	Four-Year College	Two-Year College	Aggregate
Non-Drinkers	17%	3%	20%
Drinkers	73%	7%	80%
Alcohol Usage by Age			
	Under 21	Over 21	Aggregate
Non-Drinkers	12%	8%	20%
Drinkers	31%	49%	80%

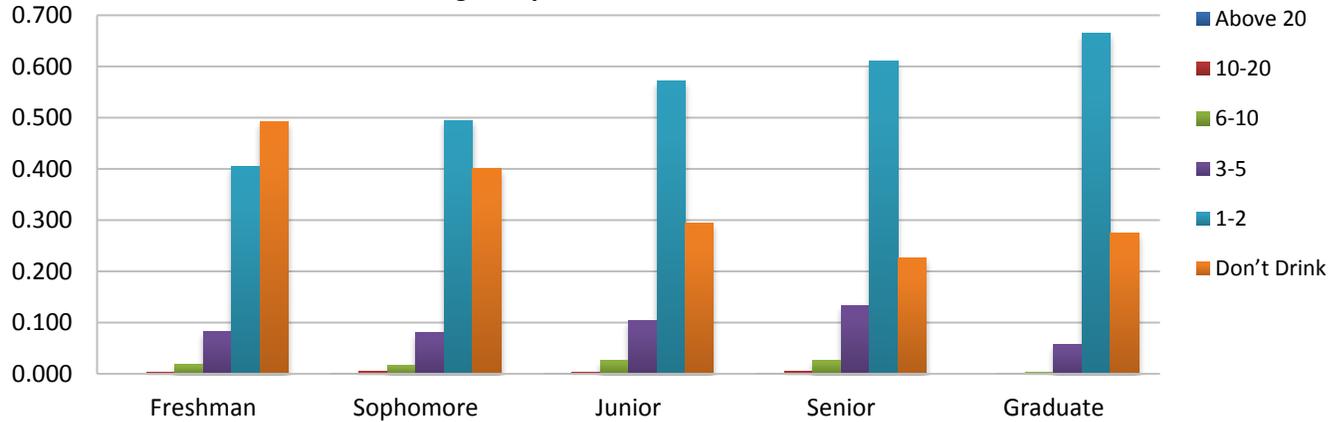
The mean number of drinks per week stood at 8.9 drinks per drinker. However, the mean number of drinks per drinker in four-year colleges stood at 9.1 drinks and 7.7 drinks in the two-year colleges. Figure 1.4 shows the daily average number of drinks taken by students in four and two-year colleges while Figure 1.5 provides insight into drinking habits of the different year groups in school.

Figure 1.4
Daily Average Number of Drinks by Institution Type



As shown, 49% of students in their freshman year, more than any other year group, reported not drinking in the last three months leading to the survey. Approximately 66% of graduate students

Figure 1.5
Average Daily Number of Drinks Per Year In School

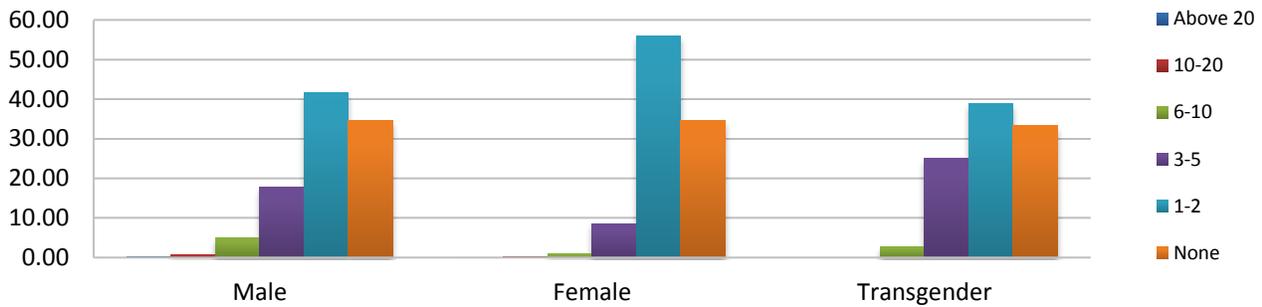


reported taking 1 or 2 drinks per day, higher than any other group of students for that range of drinks. Seniors followed this closely; about 61% took 1-2 drinks daily, then juniors (57%), sophomores (50%) and freshmen (40%). Approximately 13% of seniors reported drinking between 3- 5 drinks per week, higher than any other year group in that range. This was followed closely by juniors, approximately 10% of who reported taking between 3-5 drinks per week. More significantly, Table 1.1 shows the mean number of drinks per year group. Although Figure 1.5 shows that freshmen were most likely to report non-consumption of alcohol, graduate students had the lowest average alcohol consumption; specifically, 5.4 drinks per week as compared to seniors who drank an average of 9.4 drinks per week.

Year in School/Gender	Mean [Number of Drinks]	Standard Deviation	Minimum	Maximum	Sample Size
Freshman	5.9	11.5	0	142	3,739
Sophomore	6.5	11.8	0	168	3,419
Junior	7.9	11.9	0	165	3,332
Senior	9.4	13.4	0	200	3,293
Graduate	5.4	7.7	0	120	2,162
Male	9.8	15.1	0	200	6,173
Female	5.4	8.4	0	165	10,211
Transgender	17.6	9.2	0	143	39

Even though respondents who identified as either female or transgender were more likely (approximately 32%) than the male gender to report not drinking in the last thirty days leading to the survey (as shown in Figure 1.6), respondents who identified as transgender had the highest mean number of drinks; averaging 17.6 drinks per week, followed by males who drank 9.8 drinks per week, with females drinking 5.4 drinks per week, on average.

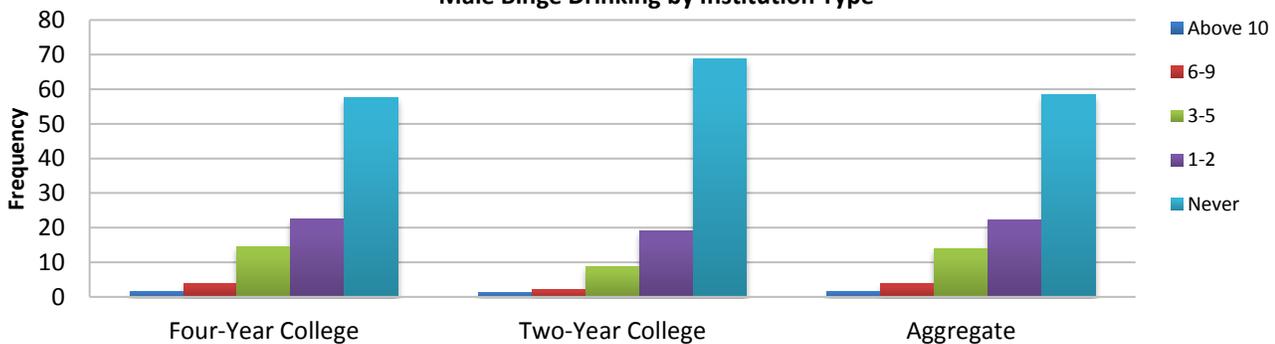
Figure 1.6
Average Drinks Per Week by Gender



Binge Drinking

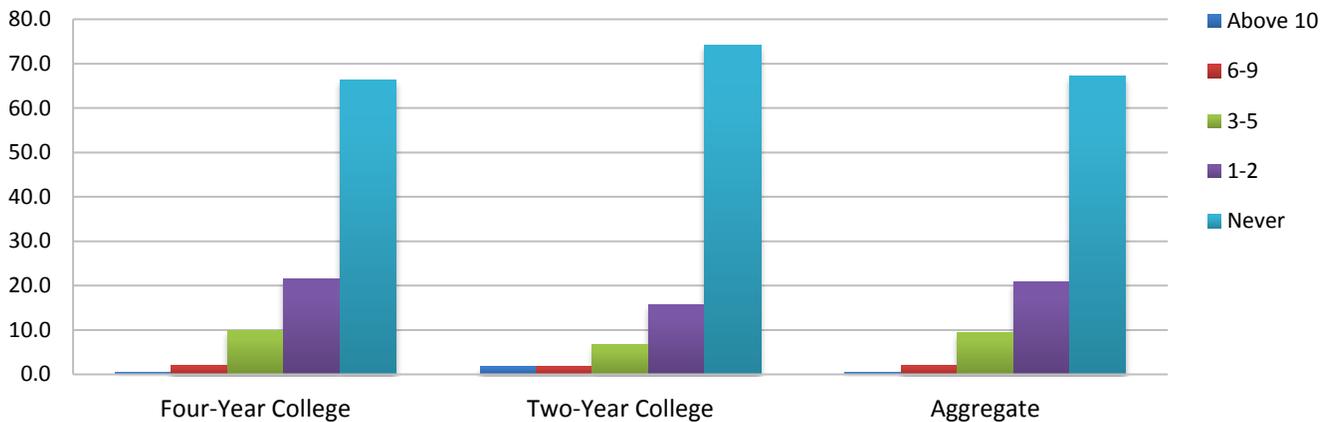
Figure 1.7 presents data on binge drinking among male students in two-year colleges and four-year colleges. Overall, 59% of the respondents reported not binge drinking (taking 5 or more drinks for males and 4 or more drinks for females, at a sitting) in the last two weeks leading to the survey. This marks an improvement from the 2012 CORE survey figure of 57%. However, male students in four-year colleges slightly surpassed their two-year counterparts in the rates of binge drinking, with approximately 43% reporting having binged at least once the last two weeks as against 31% in two-year college campuses (as shown in Figure 1.7).

Figure 1.7
Male Binge Drinking by Institution Type



The proportion of non-binge drinkers among female students was however better than their male counterparts as an aggregate 67% reported not binge drinking in the in last two weeks leading to the survey. On the other hand, 26% of female students in two-year colleges reported binge drinking, at least once, in the last two weeks preceding the survey. This compares to 34% of female students in four-year colleges who reported binge drinking at least once in the last year (as shown in Figure 1.8).

Table 1.8
Frequency of Female Binge Drinking



Underage Binge Drinking in Illinois Colleges

While binge drinking is generally a serious public health problem in the United States, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) notes that drinking by young people poses enormous health and safety risks; responsible for the deaths of approximately 4,358 young people (less than 21 years) each year. To assist in developing effective programs targeted at underage drinking and binge drinking in Illinois colleges, Figures 1.9 and 2.0 visualize the rate of binge drinking among male and female underage students.

Across the state, approximately 39% of underage male students reported binge drinking at least once in 2014 as opposed to 33% among female students. Among four-year colleges, female underage binge drinking stood at 34% compared to approximately 26% in the two-year colleges. On the other hand, the percentage of male underage students who reported binge drinking at least once, stood at 40% for four year college students, compared to approximately 30% for two-year college students.

Figure 1.9
Female Underage Binge Drinking

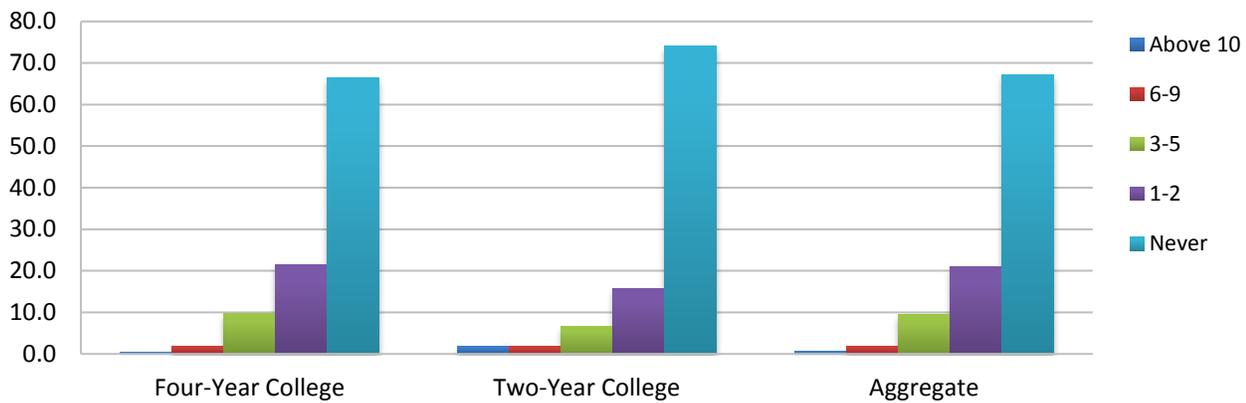
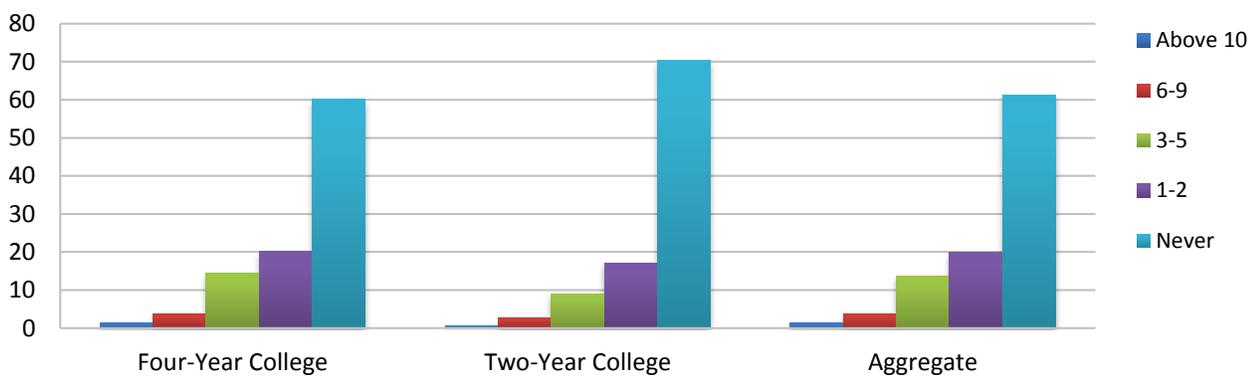


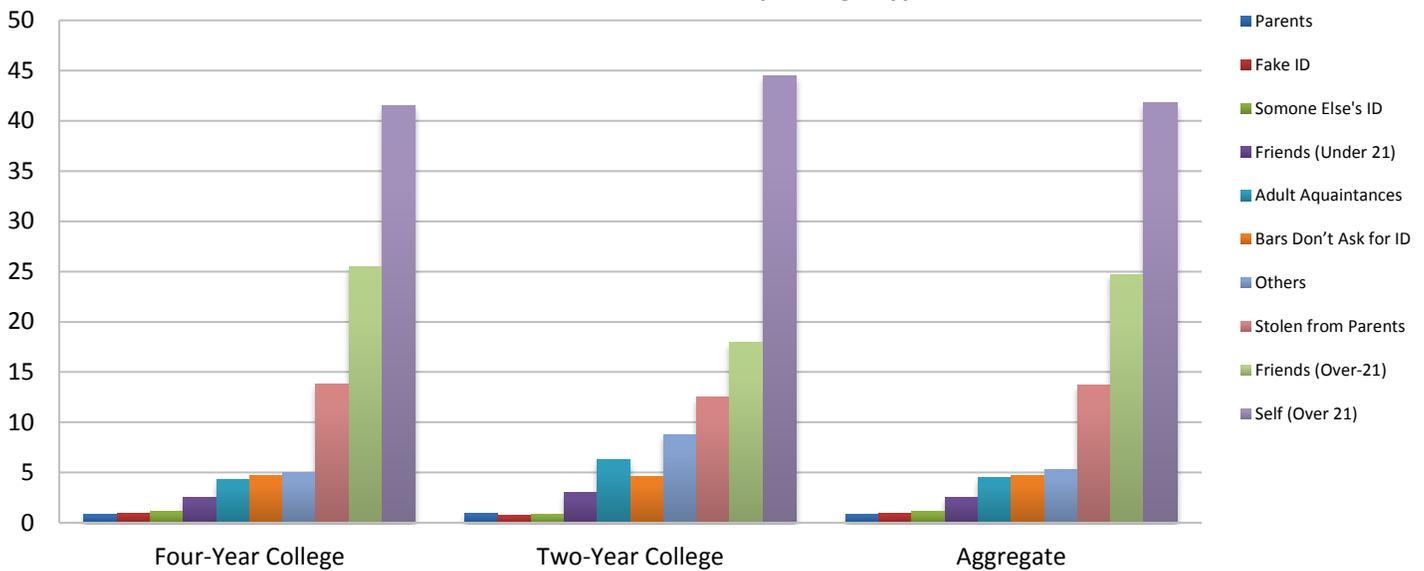
Figure 2.0
Male Underage Binge Drinking



Sources of Alcohol

Understanding the main sources of alcohol on college campuses remains an important tool in developing effective alcohol use prevention and intervention programs. The 2014 CORE survey collected information on the means by which students obtain alcohol. 42% of the respondents who are of the legal drinking age reported purchasing alcohol themselves, at least once. Also, approximately 14% of the respondents reported taking alcohol from their parents without their knowledge while 5% obtained alcohol from bars that do not check IDs. 3% of students under 21 reported getting alcohol through their friends while approximately 0.9% of the respondents said they obtained alcohol either through a fake ID or using someone else's ID, at least once. A visual comparison of the sources of drinking between two-year colleges and four-year colleges is provided in the Figure 2.1.

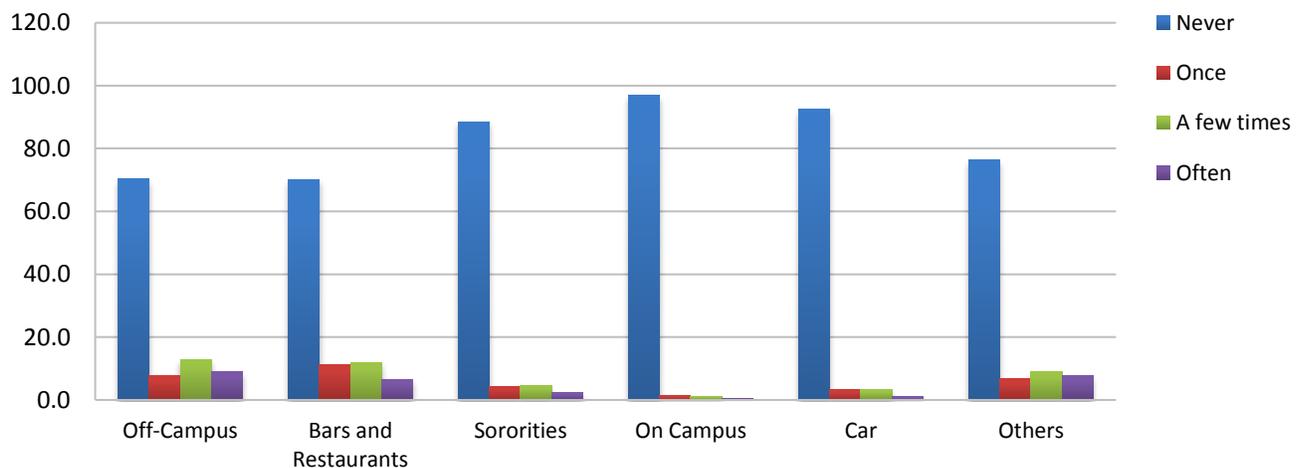
Figure 2.1
Sources of Alcohol by College Type



Where Is Alcohol Consumed In Colleges?

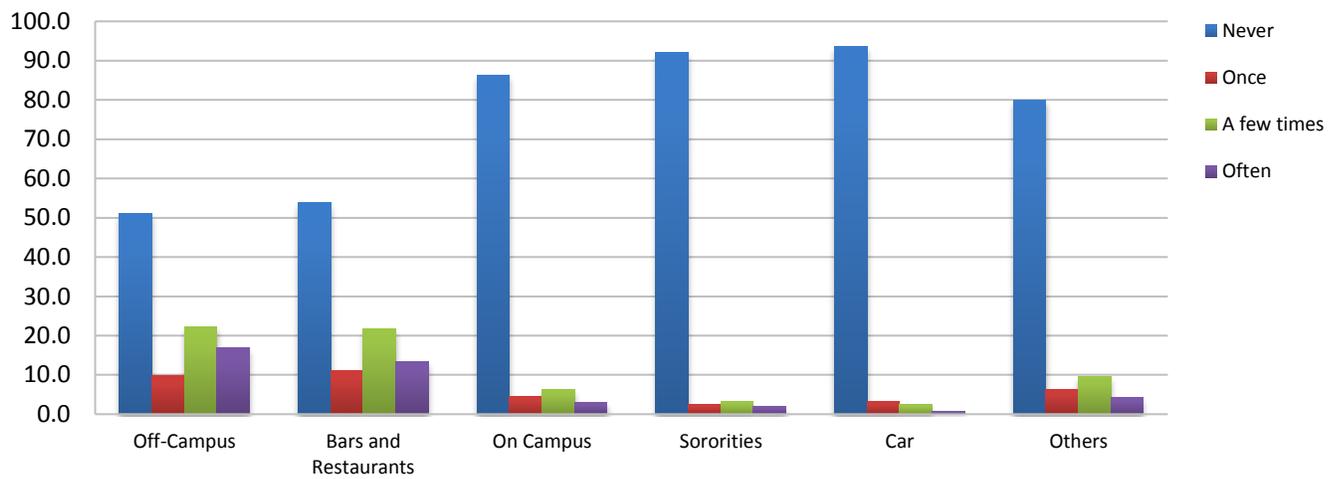
Knowing where alcohol is most consumed is fundamental to developing evidence-based alcohol education and effective tools for raising awareness about drinking among students. To this end, the 2014 CORE survey adopted a unique approach to obtain insights into the physical locations and social events at which students most frequently consume alcohol. Specifically, students were asked to report where and how often they drink at these locations and events.

Figure 2.2
Where is Alcohol Consumed in the Two-Year Colleges

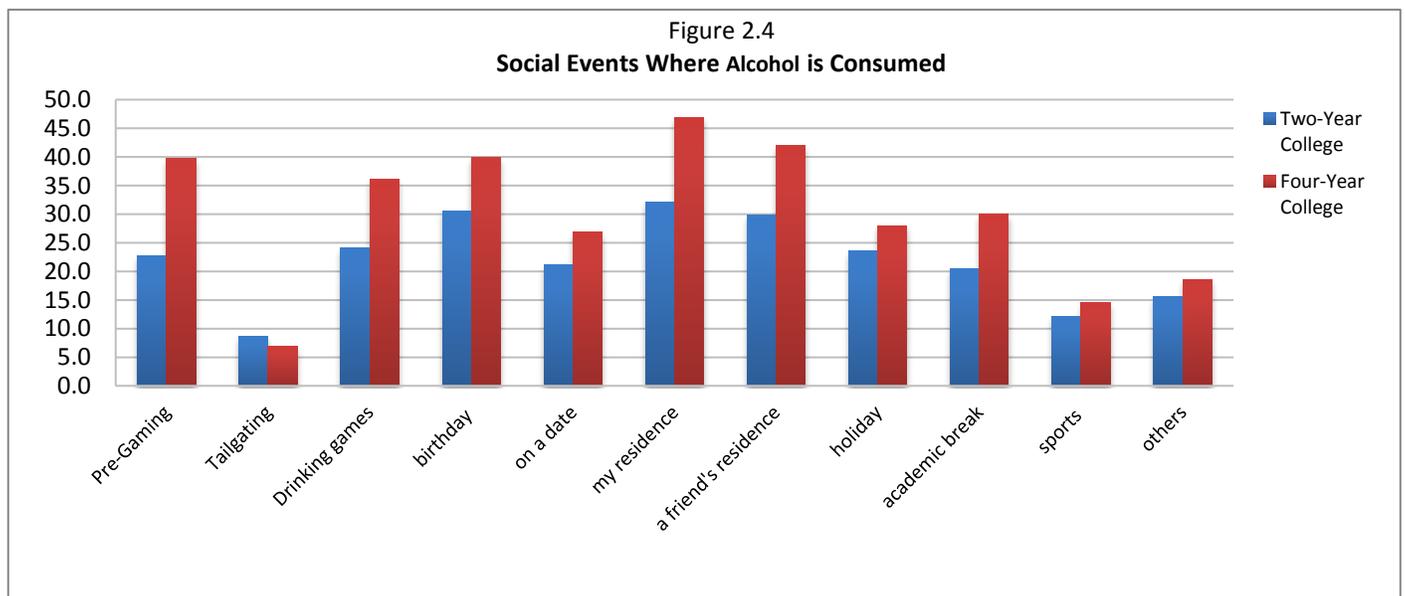


As shown in Figure 2.2, approximately 9% of students in two-year colleges reported drinking often off-campus, 7% reported drinking often at bars and restaurants and about 8% often at other sites (not mentioned). 2.4% also reported drinking in their Greek Houses often while approximately 1% reported often drinking in cars. The trends are similar for four-year colleges with approximately 17% and 13% reporting drinking often at off-campus sites and at bars respectively. Additionally, 4% reported drinking at other sites, while approximately 3% and 1% reported often drinking on campus and in their cars respectively.

Figure 2.3
Where is Alcohol Consumed in the Four-Year Colleges



At Which Social Events is Alcohol Consumed?

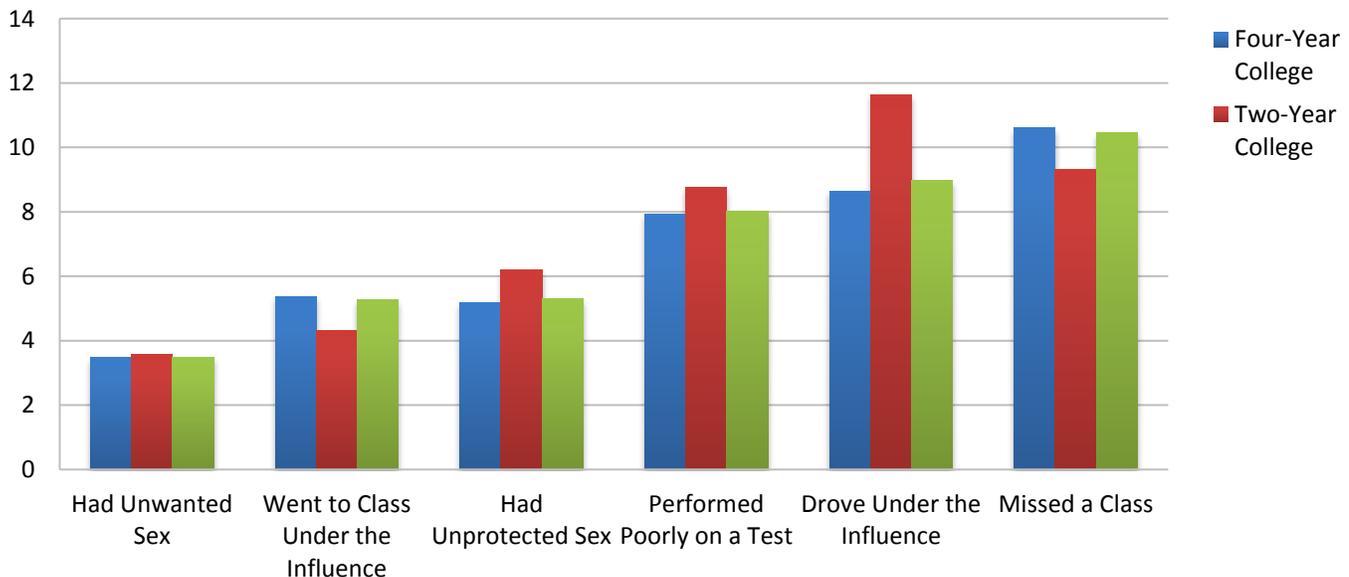


Approximately 47% of the respondents in four year-colleges reported drinking at home at least once, while relaxing – the highest percentage for a single place where alcohol is consumed in the four-year college campuses. Approximately 42% also reported drinking during a visit to a friend's residence while 40% said they, for at least once, drank at birthday parties and for pre-games. A similar trend is observed on two-year college campuses, where approximately 31% of the respondents reported drinking, at least once, while relaxing at home and also at birthday parties. Approximately 30% also reported drinking at a friend's residence, at least once, while on a visit as shown in Figure 2.4

On the Effects of Drinking: Risky Behaviors

To provide a gauge into the harmful effects of drinking, students were asked to report to what extent they experienced a number of events due to drinking or after taking alcohol. The single most reported effect of drinking was a hangover, which approximately 38% of respondents reported experiencing, at least once after drinking. Approximately 10% and 8% reported having missed a class and having performed poorly on a test, respectively— as a result of drinking. However, while four-year college students were more likely (11%) to report missing a class after drinking than their two-year college counterparts (9%), two year-college students were more likely (9%) to perform poorly on a test than their four-year colleagues (8%) after drinking. Again, even though a comparison between four and two-year colleges reveal that students in both types of institutions are as likely (approximately 4%) to engage

Figure 2.5
Risky Behaviors After Drinking by Institution Type

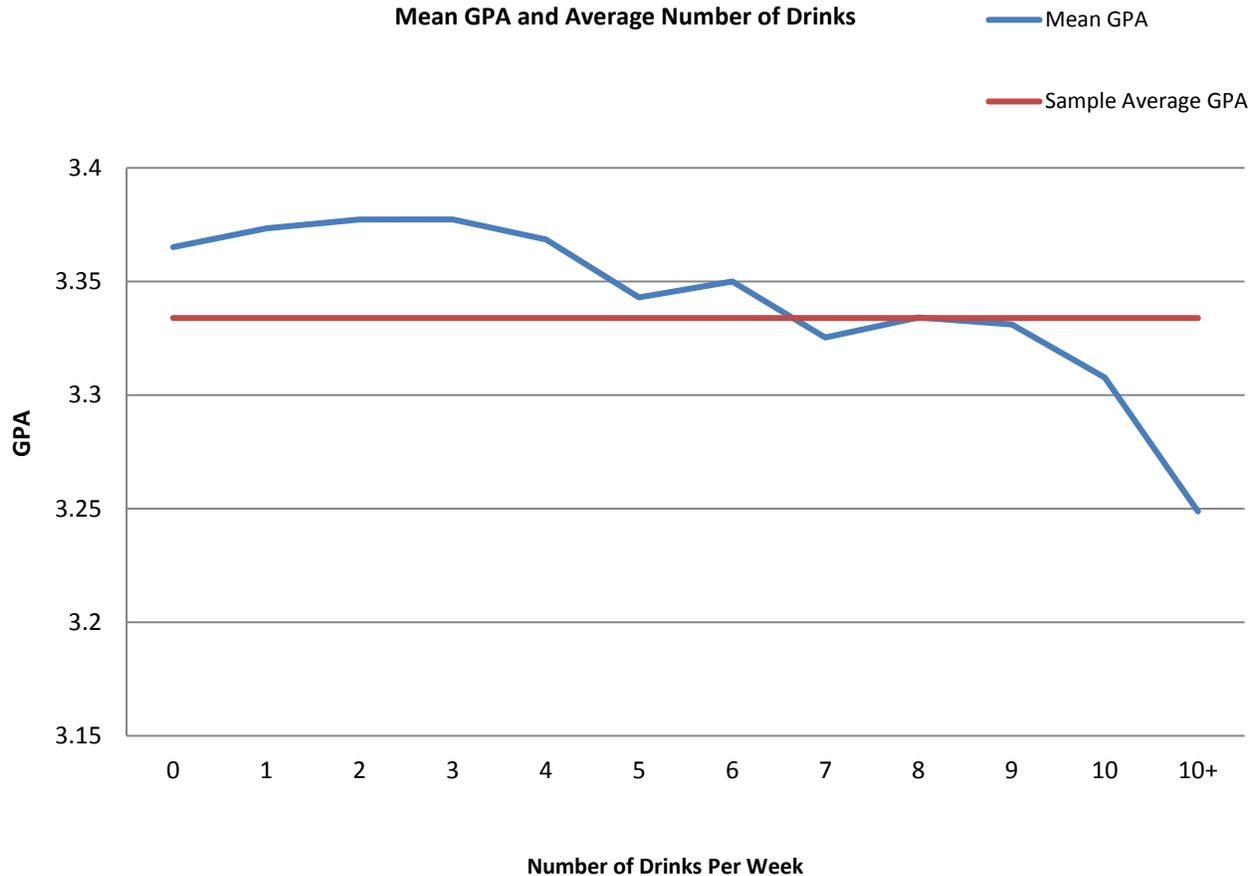


in unwanted sex as a result of drinking, students in two-year colleges were slightly more likely (6%) than their four-year counterparts (5%) to have unprotected sex as result of drinking. While about 4% of two-year college students felt, at least once, that they might have a drinking problem, the figure stood at about 6% for four-year college students (*not shown*). With regard to drunk driving, 12% of two-year college students reported ever driving under the influence, compared to approximately 9% of four-year college students. Figure 2.5 summarizes these statistics and provides an institutional comparison of the effects of drinking.

Effects of Alcohol on Students' GPA

On the relationship between students' GPA and the average number of drinks per week, we observe a generally negative association. On the average, students who reported taking fewer than 6.5 drinks per week reported higher GPAs than respondents who reported taking more than 6.5 drinks per week. Their GPAs were generally higher than the average GPA for the entire sample (as shown in Figure 2.6).

Figure 2.6
Mean GPA and Average Number of Drinks



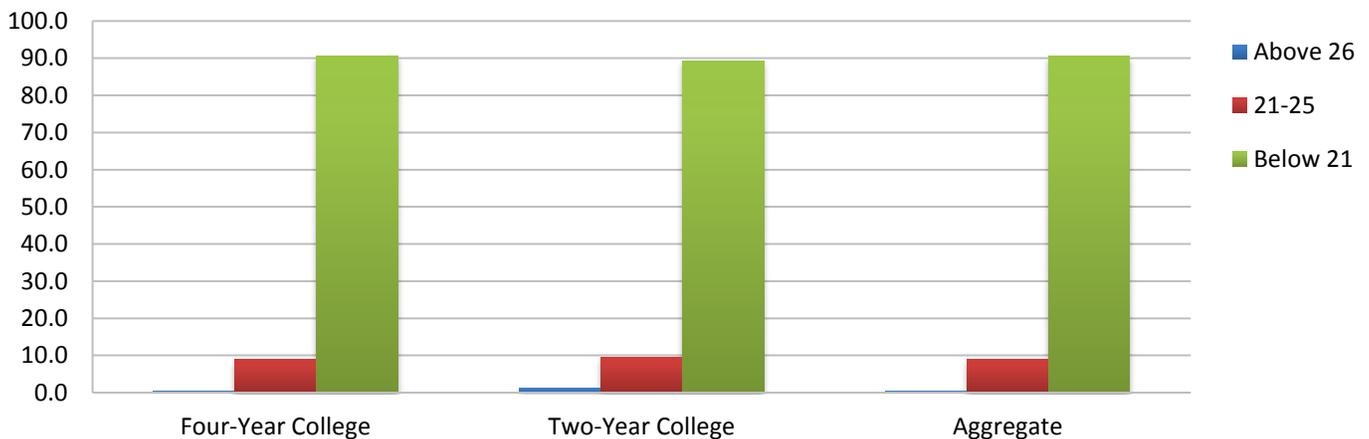
The table below compares average GPAs for students grouped by the amounts of drinks taken per week.

Drinks	Sample	Mean GPA	Standard Deviation	Minimum GPA	Maximum GPA
0	4,947	3.37	0.59	0	4
1	963	3.37	0.57	0	4
2	997	3.38	0.54	0	4
3	753	3.38	0.58	0	4
4	732	3.37	0.53	0	4
5	566	3.34	0.55	0	4
6	631	3.35	0.56	0	4
7	425	3.33	0.58	0	4
8	472	3.33	0.58	0	4
9	326	3.33	0.55	0	4
10	502	3.31	0.57	0	4
10+	3,752	3.25	0.56	0	4
Total	15,066	3.33	0.57	0	4

Age at First Intoxication

The survey also collected information on the ages of respondents when they first drank alcohol to the point of intoxication. Overall, 91% reported getting intoxicated before age 21. Four-year college students who reported getting intoxicated before age 21 stood at 91%, closely matching the sample

Figure 2.7
Age at First Intoxication by College Type

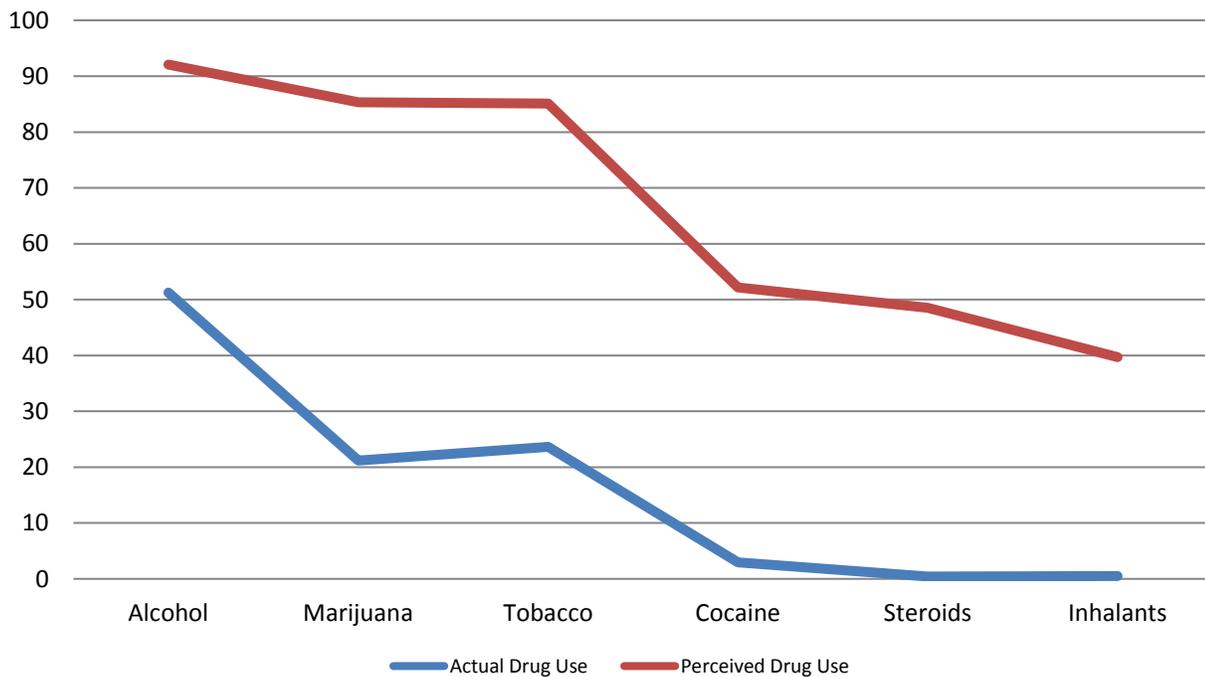


average. The percentage for two-year college students stood at about 89%, slightly below the sample average.

Perceptions about Alcohol and Drug Use in Illinois Colleges

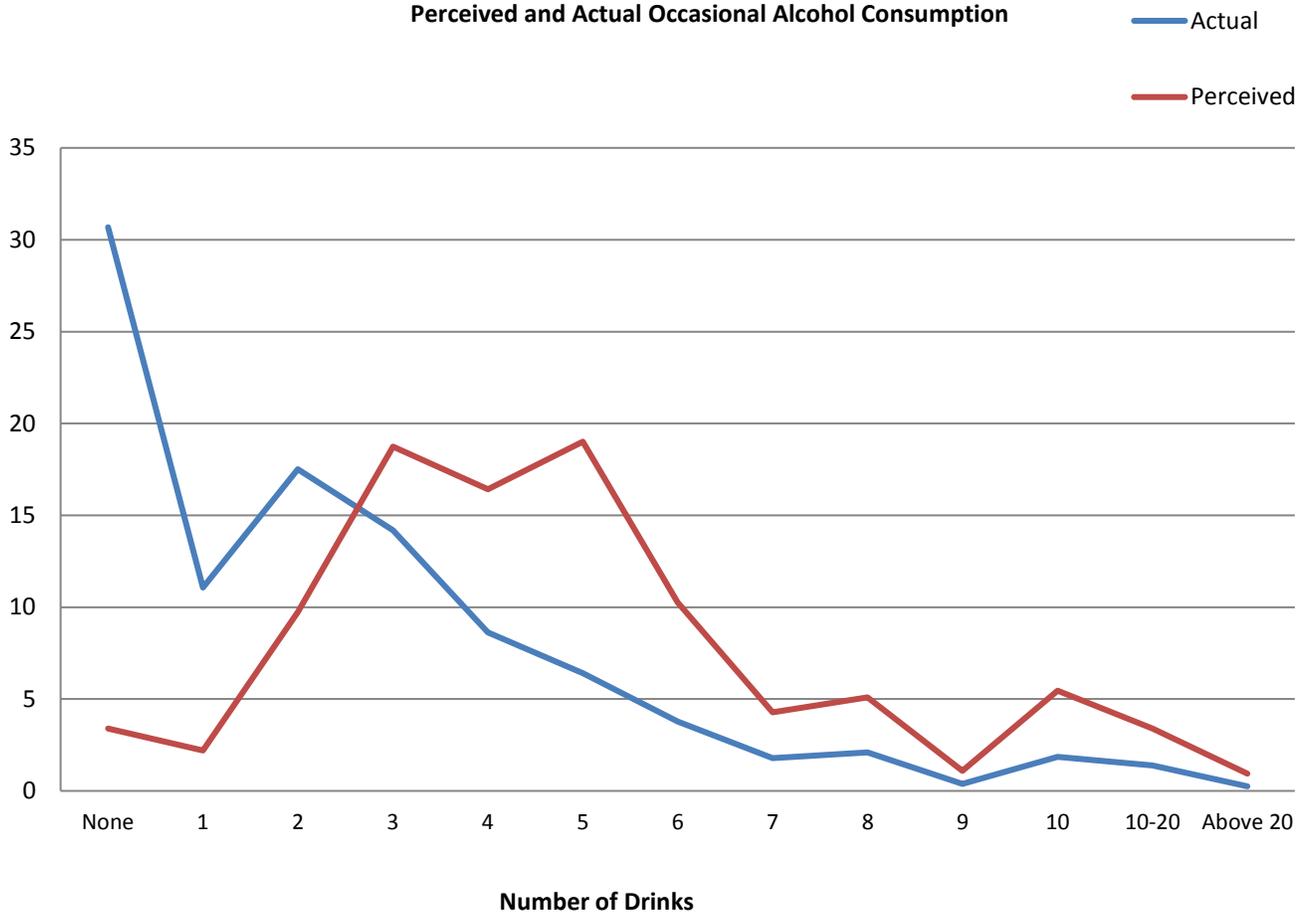
Having wrong perceptions about the real levels of drug and alcohol use could strongly influence individual alcohol and drug use habits. Kraemer (2001) notes that when students misperceive and overestimate the amount of alcohol the average student at their university consumes, they attempt to compensate for the gap by consuming excessive amounts. In view of the foregoing, accurate data on perceived alcohol and drug use levels, as well as the actual levels, become important in health education and policy planning. To this end, the 2014 CORE survey asked respondents to guess, based on their personal beliefs, how many of their peers use alcohol and other drugs at different frequency levels. Figure 2.8 shows the discrepancies between perceived levels of alcohol and drug use in colleges across the state. Even though alcohol use among the sample stood at approximately 51%, the general perception was that 92% of students used alcohol. Similar discrepancies are observed for marijuana and tobacco use, showing a perceived and reality gap of 64 percentage points and 61 percentage points respectively.

Figure 2.8
General Perceptions About Drug and Alcohol Use Levels



Again, the perceived level of alcohol consumption by the average student on a typical occasion³ differed significantly from the actual amounts of alcohol consumed on a typical occasion (as shown in Figure 2.9). Statistically, the perceived alcohol consumption on a typical occasion averaged 5.2 drinks while the reported actual consumption of alcohol on a typical occasion averaged 2.5 drinks per occasion. This is not just statistically different but significantly different from the actually consumed alcohol⁴.

Figure 2.9
Perceived and Actual Occasional Alcohol Consumption



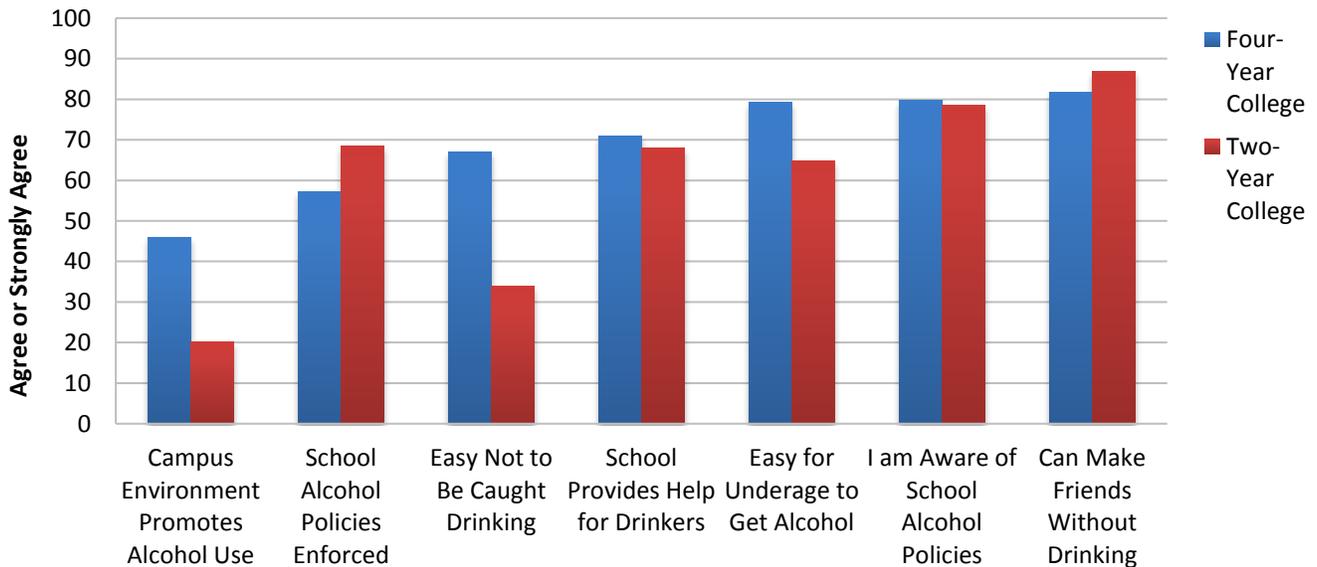
³ Occasion here refers to a particular event. For example, at a birthday party, before a football game etc.

⁴ The results of the statistical tests are reported in the technical appendix attached to the report.

While approximately 77% of students in two-year colleges agreed or strongly agreed to being aware of their school’s alcohol and drug use policies, approximately 65% agreed or strongly agreed that it is easy for underage students to get alcohol without being caught. A similar trend is observed on four-year college campuses where even though 80% of the students agreed or strongly agreed to being aware of alcohol use policies, a similar proportion agreed or strongly agreed that it easy for underage students to get alcohol without being caught. Only 57% agreed or strongly agreed with the notion that those policies were enforced.

Additionally, even though about 67% of the four-year college students also agreed or strongly agreed that it was not easy to be caught drinking, approximately 71% agreed or strongly agreed that their schools provide medical help for students regarding the use of alcohol and other drugs. Generally, many students (87% in two-year colleges and 82% in four-year colleges) agreed or strongly agreed that it was possible to make friends without drinking. On the issue of lowering the minimum legal age for drinking, 57% of respondents below the age of 21 years supported the idea while 43% opposed the idea (*not shown*). Figure 3.0 provides a graphical comparison of beliefs and perceptions about alcohol and drug between the four and two-year colleges.

Figure 3.0
Students' Perceptions About Alcohol by Colleges Type

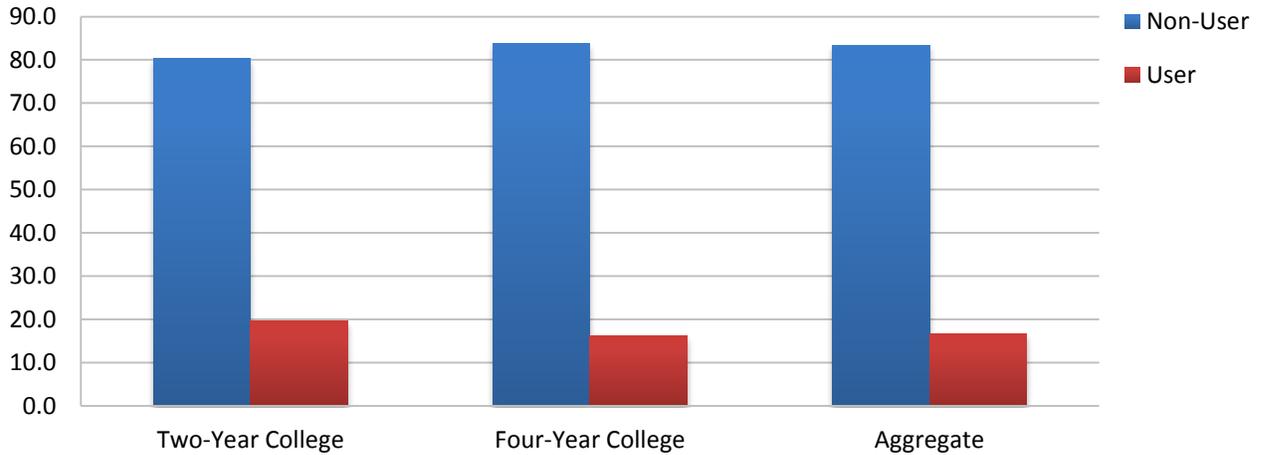


Marijuana Use among Students in Illinois

Overall, 16.6% of the sample reported having used marijuana in the last thirty days leading to the survey. However, marijuana use was relatively higher among two-year college students, 19.6% of who reported the use of marijuana as against 16.2% of four-year college students who used marijuana (as

Figure 3.1

Marijuana Use by Institution Type



shown in Figure 3.1). Transgender respondents reported a relatively higher rate of marijuana consumption (33%) than males (22%) and females (14%) (as shown in Figure 3.2). Among the different age groups, 50% of students less than 21 years old reported marijuana use, followed closely by those between the ages of 21 and 25, approximately 40% of who reported marijuana use as well (*not shown*).

Figure 3.2

Marijuana Use by Gender

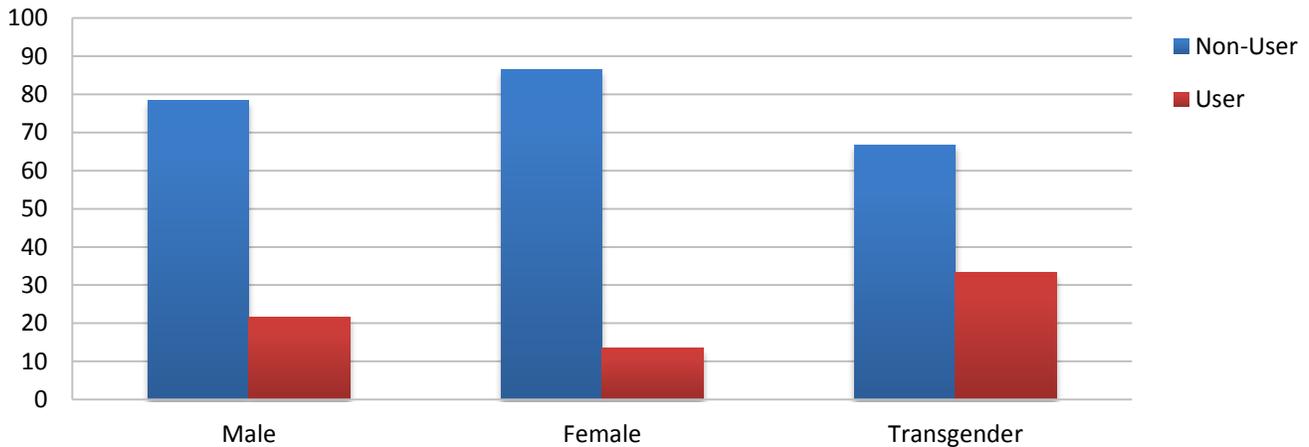
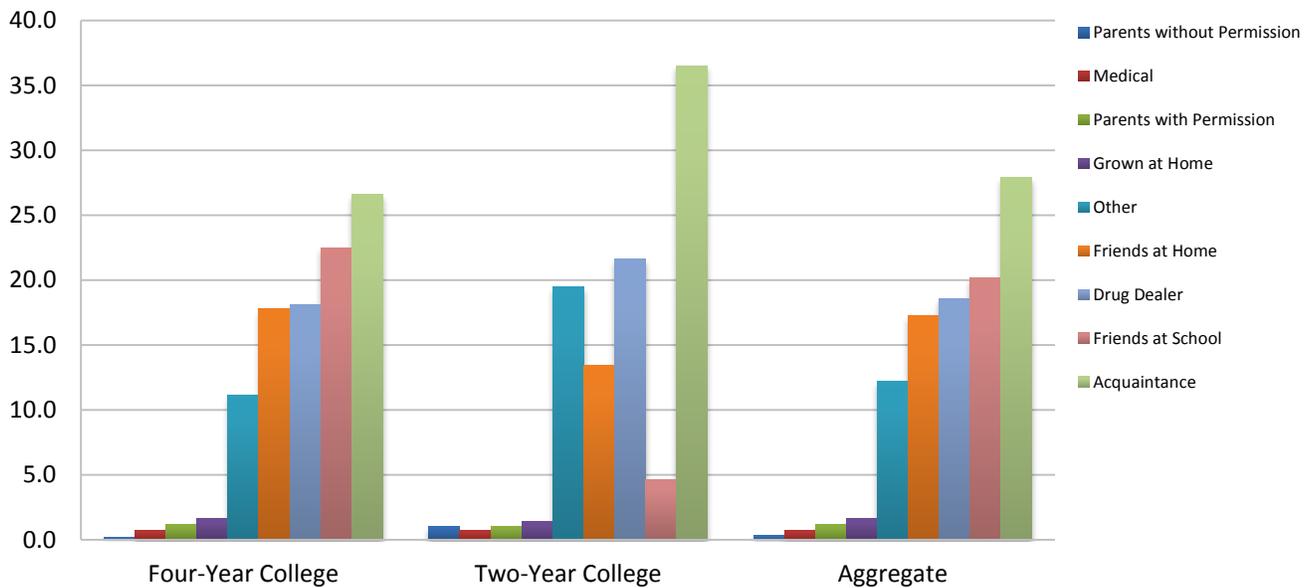


Figure 3.3
Sources of Marijuana by College Type



The major sources of marijuana according to the 2014 survey were acquaintances, drug dealers, friends at home and school. Specifically, 37% of two-year college students and 27% of their four-year counterparts reported obtaining marijuana, at least once, from acquaintances. This was followed by drug dealers, who supplied 22% of two-year college students and 18% of their four-year counterparts with marijuana (as shown in Figure 3.3). Overall, 20% of the students reported, at least once, obtaining marijuana from friends at school while 19% reported obtaining from drug dealers.

CONCLUSION

Alcohol use among college students in Illinois generally remained high with approximately 80% of the respondents reporting alcohol use in the last year though this compares slightly favorably with the 2012 figure of 82.1%. Tobacco remained the single most frequently used drug other than alcohol— with approximately 24% of all respondents reporting its use in the last year. Marijuana use increased slightly from 15% in 2012 to approximately 17% of all respondents in the last year. Underage alcohol use on the other hand, experienced significant increase from approximately 60% of all underage respondents in 2012 to 72% of all underage respondents in 2014. Perhaps, more importantly, with 10% of all drinkers reporting having once missed a class and 8% performing poorly on a test, at least once, due to drinking, there is an urgent need for increased alcohol and drug use education particularly among seniors and juniors and the transgender community where self-reported use of alcohols remained high.

TECHNICAL APPENDIX

A drink for the purpose of this study is defined as:

- 5oz. wine, 10oz. wine cooler
- 12oz. beer (10oz. microbrew, 8-9oz. Malt Liquor, Canadian Beer or Ice Beer)
- 1.5oz. of 80 proof liquor (mixed drink or shot)

The average number of drinks is estimated as total number of drinks in a week per the drinker.

Paired Sample Test of Means: Actual vs Perceived Mean Number of Occasional Drinks

```
-----+-----
One-sample t test
-----+-----
Variable |      Obs      Mean   Std. Err.   Std. Dev.   [95% Conf. Interval]
-----+-----
      Q34 |    12336    5.152399   .037535    4.168925    5.078825    5.225974
-----+-----
      mean = mean(Q34)
Ho: mean = 2.5597
degrees of freedom = 12335
      t = 69.0741
      Ha: mean < 2.5597      Ha: mean != 2.5597      Ha: mean > 2.5597
Pr(T < t) = 1.0000      Pr(|T| > |t|) = 0.0000      Pr(T > t) = 0.0000
```

REFERENCES

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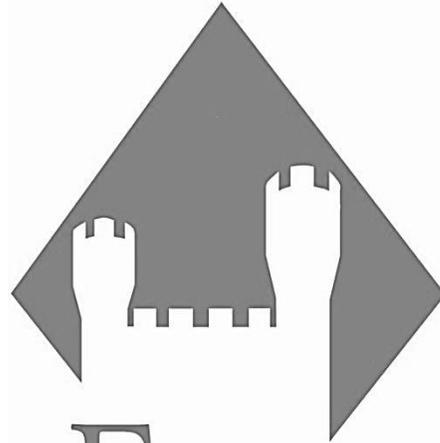
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